

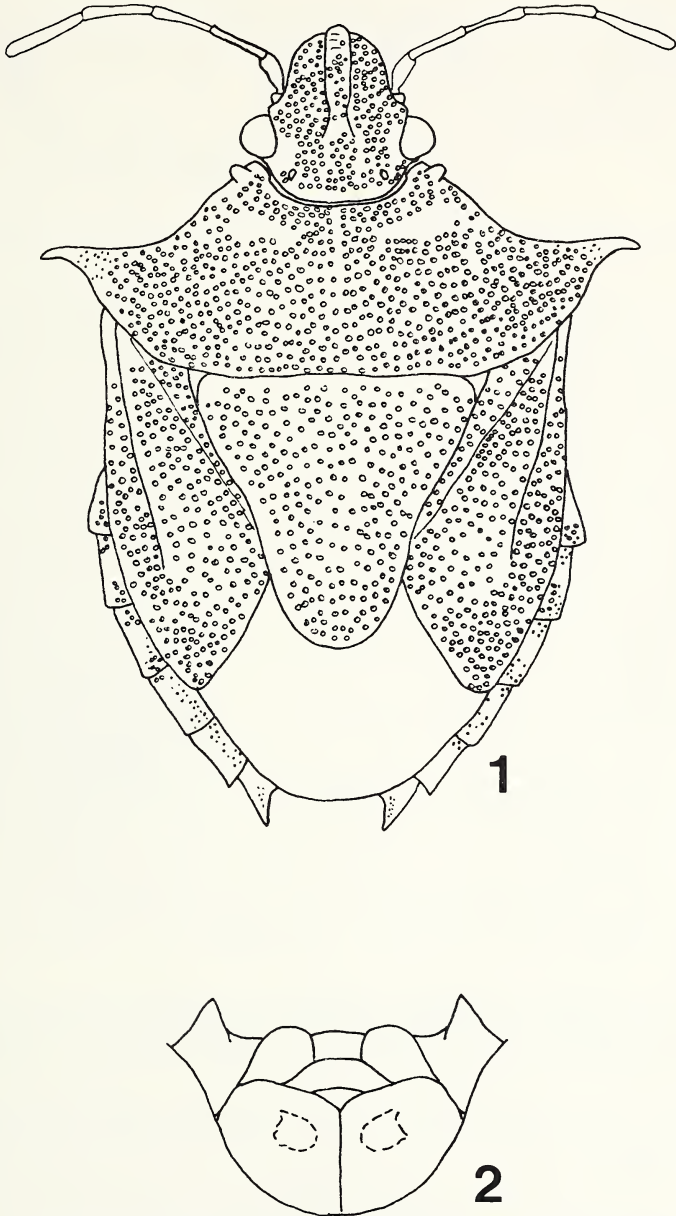
**MENUDO, A NEW GENUS OF PENTATOMIDAE
(HETEROPTERA) FROM PUERTO RICO**

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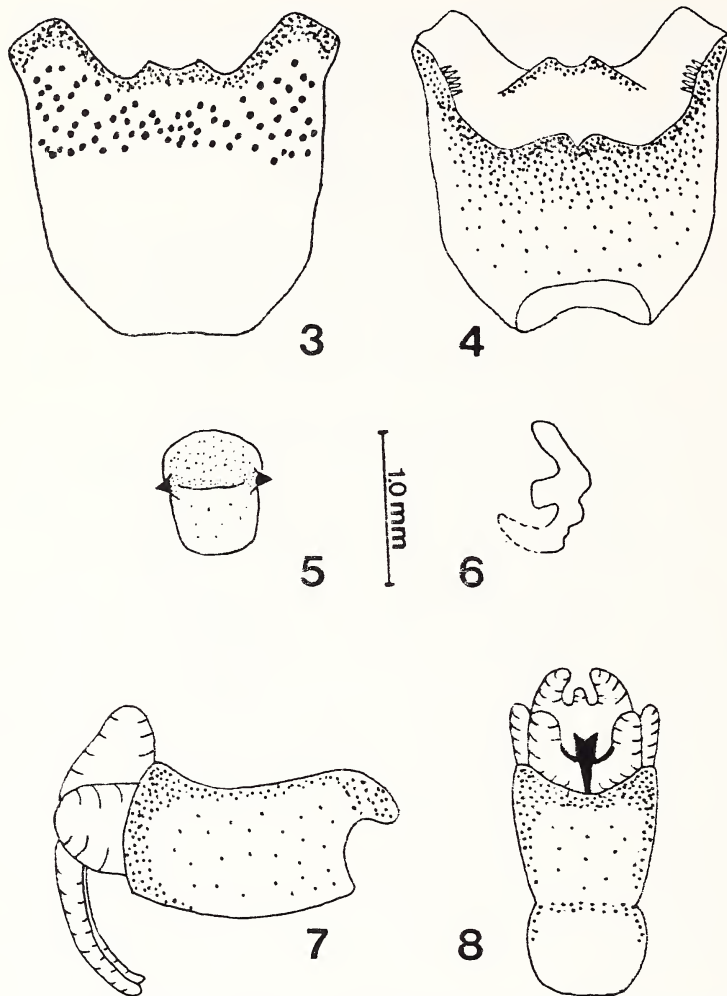
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Abstract.—A new pentatomid genus and species, *Menudo femoralis*, is described from Puerto Rico. The new genus superficially resembles the African genus *Aspavia*, but its true alliance appears to be with the Latin American genera near *Padaeus* or *Agroecus*.

Among a series of pentatomid specimens collected by Elbert L. Sleeper in Puerto Rico I found two, collected at different dates and localities, representing an undescribed genus. A subsequent search by my colleague David A. Rider uncovered three more specimens, also from Puerto Rico, in the collection of the United States National Museum. The genus is similar, but probably not related, to the African genus *Aspavia* Stål, especially with respect to the structure of the pronotum, the possession of a spine at the superior apex of each of the femora, and the form of the metapleural scent gland orifice and evaporatorium. The specimens differ from *Aspavia*, and from nearly all New World Pentatomini, by having the bucculae continuous behind the oral groove. Bucculae united posteriorly is a character-state found in most, but not all, asopine pentatomids. However, the new genus, which I propose to name *Menudo*, lacks the crassate rostrum and the genitalic structures (parandria and thecal shield) diagnostic of the asopines (McDonald, 1966). Although Kirkaldy (1909) considered united bucculae to be diagnostic of the Asopinae, a number of genera with united bucculae are scattered throughout the Pentatomidae, e.g., *Placocoris* Mayr (Pentatominae), *Brachystethus* Laporte (Pentatominae), *Tahitocoris* Yang (Podopinae), *Edessa* F. (Pentatominae), and *Parastrachia* Distant (Parastrachiinae). I place *Menudo* in the nominate subfamily and tribe Pentatomini. In the keys to the Western Hemisphere genera of Pentatomini (Rolston et al., 1980) the new genus falls into section 1; those lacking a tubercle or spine on the base of the abdomen. In the conspectus of section 1, exclusive of South America (Rolston and McDonald, 1984), the new genus quickly keys to a small group of genera including *Loxa* Amyot & Serville and allies, which have the superior apex of the femora spinose. I suspect that the actual relationships of the new genus lies among genera related to *Padaeus* Stål and *Agroecus* Dallas. This latter group includes some obscure South American genera, some of which I have not seen, but whose descriptions would exclude this new genus. The pygophore of the male specimen is unusual in that it bears a series of five pegs on each lateral margin. I know of no other pentatomid genus with this feature, although in some *Padaeus* species the lateral ridge of the pygophore does bear a single erect spine. The parameres in *Padaeus*, as well as the arrangement and proportions of the different male genitalic structures, are similar to those of *Menudo*. In both, the pygophoral capsule is deep, the proctiger is prominent and bulbous, and the parameres are elongate, bent, and laterally compressed. In *Aspavia*, by contrast,



Figs. 1-2. *Menudo femoralis*, n. sp. 1. Habitus, dorsal aspect. Venation of hemelytral membrane (not shown) simple, transparent. 2. Female genitalia, ventro-posterior aspect.



Figs. 3-8. Male genitalia. 3. Pygophore, ventral view. 4. Pygophore, dorsal view. 5. Proctiger, ectal view. 6. Left paramere, ento-lateral view. 7. Aedeagus, lateral view. 8. Aedeagus, dorsal view.

the pygophoral cup is shallow, the proctiger is diminutive and the parameres are short and thick.

Menudo, new genus

Diagnosis. Third (second visible) abdominal sternite lacking mesial tubercle or spine. Ostiolar rugae short, auriculate. Each femur terminating dorsally in short spine (longest on metafemora); inferior surface unarmed, neither spines nor tubercles present. Width of scutellum at distal end of frena about $\frac{4}{5}$ of basal width. Anterolateral pronotum with margin obtuse, not dentate; weakly rugulose because of coarse punc-

tures. Eyes proximal to anterior angle of pronotum. Bucculae elevated and continuous behind oral groove; first rostral segment projecting slightly behind bucculae. Tylus slightly but distinctly longer than juga. Pro- and mesosternum with flat, pilose carina mesally.

Menudo femoralis, new species

Description. Dull brown with dense black punctation dorsally and ventrally. Length from tip of tylus to apex of abdomen 5.5 mm. Width across humeri 4.4 mm (Fig. 1).

Head. Tylus slightly but distinctly longer than juga, tip of tylus rounded; lateral margins of juga evenly sinuate. Length of head from imaginary line connecting ocelli to tip of tylus 1.2 mm; width across antecular angles 1.0 mm. Antennae yellow, segment I almost attaining apex of head, segment V the longest. Bucculae elevated and continuous behind. Rostrum in repose attains base of abdomen, segment I slightly longer than bucculae, segment II the longest, longer than III and IV combined.

Thorax. Anterolateral margins of pronotum obtuse; punctures larger and coarser on margin than on disc. Anterior angles with short, rounded tooth. Each humerus produced into curved, outwardly directed spine. Pronotum without pronounced angle posteriorly near basal angle of scutellum. Apex of scutellum broadly rounded, concolorous with disc. Apex of each corium subrectilinear, outer apical corner angular; veins of membrane simple. Pro- and mesosternum with flat, pilose mesial carina. Scent gland auricle short, ca. $\frac{1}{8}$ of distance to metapleural margin, its apex elevate; evaporatorium restricted to much less than $\frac{1}{2}$ the distance to metapleural margin. Femora and tibia strongly black maculate; tibia subprismatic; apex of each femur terminating in short spinous projection.

Abdomen. Base strongly tumid mesially but lacking spine or tubercle. A row of broad, black spots mesally on each ventral segment. Connexiva alternate, middle third of each segment paler than anterior and posterior thirds, angles obtuse except 8th sternite terminating in long angular spine.

Genitalia. Basal plates (first gonocoxites) of female broad, expanded, strongly punctate with subcentral rounded tumescence. No spiracles evident on paratergite VIII (Fig. 2).

Pygophoral capsule of male deep, opening oriented dorso-posteriorly; ventral margin deeply concave in ventral view, bisinuate mesially (Fig. 3); inferior ridge present as ental continuation of the bisinuate margin (Fig. 4); genital plates (parandria) lacking; exterior ventral surface coarsely punctate; lateral margins bearing a series of five peg-like spines on each side. Proctiger bulbous and bearing a spur on each side at about the middle (Fig. 5). Parameres laterally compressed, "F"-shaped (Fig. 6). Aedeagus with endophallic duct short, vesica short and stout, flanked by medial penial lobes; thecal shield lacking; conjunctiva with pair of short membranous dorsal lobes, short mesial membranous lobe, and pair of long, membranous, ventral appendages (Figs. 7, 8).

Types. *Holotype:* Male, labeled: (a) Maricao PR Fish Hatchery, VIII-8-11-61. (b) Collected by Flint, Spangler. Deposited United States National Museum.

Allotype: Female, labeled: data same as holotype. Deposited United States National Museum.

Paratypes: Female, labeled: (a) Arecibo P.R. June 1940, Coll. G. Lomboglia. (b) Gen. ? species n. ?? Det. HG Barber. Deposited United States National Museum. Female, labeled: (a) Puerto Rico: Arecibo, 8.0 km E. Jayuya, 1812/6633, 762 m, B&S (TropDecid), XII-5-80. E. L. Sleeper. Deposited in collection of author. Female, labeled: (a) Puerto Rico: Mayaguez, 8.0 km SW Maricao, 1807/6657, 850 m, B&S (TropDecid), XII-9-80. E. L. Sleeper. Deposited in collection of author.

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